**MicroPatent® PatSearch FullText:** Record 18 of 22

Search scope: US EP WO JP; Claims, Title or Abstract

Years: 1976-2001

Text: nitrilase AND use NOT bromoxynil

[no drawing available]

[Go to first matching text](#)**JP61162195****PRODUCTION OF AMIDE WITH BACTERIUM**

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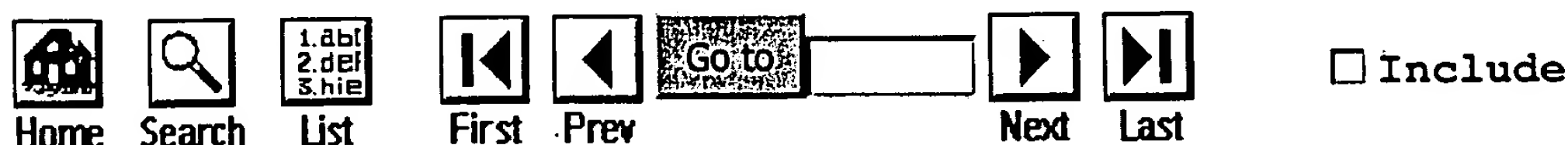
Inventor(s): ENOMOTO KANEHIKO ; SATO YOSHIKI ; NAKAJIMA YASUTAKA ; FUJIWARA
ATSUSHI ; DOI TOSHIKI**Application No.** 60002725 JP60002725 JP, **Filed** 19850111,

Abstract: PURPOSE: In a method where a nitrile compound is reacted with water and converted into an amide compound by the action of a bacterium having nitrilase (^) activity, to produce industrially the amide, by irradiating a mold to be used with light rays with given wavelength.

CONSTITUTION: A nitrile compound is reacted with water and converted into a corresponding amide compound by the use (^) of a bacterium belonging to the genus Corynebacterium, Nocardia, Bacillus, Bacteridium, etc., having nitrilase (^) activity, and positive Gram stain properties. In the operation, a mold to be used is irradiated with light rays with about 300W450nm wavelength before completion of hydration reaction, and exposed to light energy having about $2 \times 10^{-3} \text{W}$ about $1 \times 10^{-2} \times \text{E/g mold.sec}$. The reaction is carried out in a container consisting at least partially of a material of no light transmission, and acetonitrile, propionitrile, benzonitrile, malononitrile, etc. are used as the nitrile compound.

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Int'l Class: C12P01302; C12P01302 C12R00113 C12P01302 C12R00115 C12P01302 C12R001365
C12P01302 C12R00107 C12P01302 C12R001265 C12P01302 C12R00101



For further information, please contact:

US5135858

Process for biological production of organic acids

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Inventor(s): Yamada, Hideaki ; Nagasawa, Toru ; Nakamura, Tetsuji

Application No. 659878, **Filed** 19910222, **Issued** 19920804

Abstract: An improved biological conversion of a nitrile such as acrylonitrile or a cyanopyridine into the corresponding carboxylic acid such as acrylic acid or a nicotinic acid by the action upon the nitrile of a nitrilase (^) enzyme, in which the improvement resides in the use (^) as the source of the enzyme of a microorganism of Rhodococcus, such as Rh. rhodochrous J-1, FERM BP-1478, which is cultured in the presence of a lactam compound.